Abstract

An object of the present invention is to provide a single-phase film of a metal sulfide with good quality, and a method for preparing a metal sulfide film at a low cost in a convenient manner. The present invention provides a preparation method of a metal sulfide film, comprising the steps of providing metal halide, such as iron halide ($FeCl_3$, FeI_3, $FeBr_3$, $FeCl_2$, FeI_2 and $FeBr_2$), as a first raw material and a thioamide compound, such as thioacetamide, as a second raw material, preferably vaporizing these raw materials and reacting them at atmospheric pressure; and a metal sulfide film prepared by this method.